"A study of Palmistry as an assessment tool for few Psychological and Physiological Variables"

A Synopsis for the award of Ph. D. in Clinical Psychology

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Significance of Study:

Science has been trying to uncover the secrets of nature by different means. We always find out the new means to dig out few things that were not seen by earlier methods. Few new methods prove to be more helpful than those used earlier. In the ancient time a Doctor was understood to be more accomplished if he had a good knowledge of medicine and physiology along with so many other disciplines of that time and could use them for the wellbeing of the patients. These interrelated disciplines included not only surgery but also yogic sciences and practices, astrological calculations, knowledge of hand signs and body signs and also of many environmental, psychological effects on the human being. This way they were able to see the things in more holistic way. Today after the advancements of many different sciences and arts we are at the same point needing to understand the interrelations of these many arts and sciences. This will provide us a more holistic picture of the things and hence increase our understanding of many complex phenomenon.

'Carl Jung' writes in the introduction part of the famous book 'The Hands of Children', "The ancient physicians never hesitated to make use of auxiliary systems such as hand reading, astrology for diagnostic and prognostic uses. And none can say that these things were not helpful to them. And actually one who had the knowledge of all these different things was believed to be more accomplished. The rises of the natural sciences and with it of rationalism in the eighteenth century were responsible for the contemptible treatment and defamation of these ancient systems, which could pride themselves for the history of many thousand years.....after two hundred years of intensive scientific progress, we can risk, testing them in the light of modern knowledge for possible truths."

If we talk about psychology we see amazing tools and tests that enable us to see through the human mind and thoughts. Who could believe 200 years back that dreams can also tell amazing secrets about our thoughts, unconscious motives and desires and even personality that might be even contradictory to what we see from outside. Then their will be Rorschach, TAT and other projective techniques that are unbelievable and even magical for a lay man for their ambiguity and accuracy. Then there came few more funny tests and assessment methods like draw a person, home-tree-river, or story telling tests.

But while we are looking for new techniques, there are few ancient things that must be rediscovered and interpreted to see if they also have some truth and validity since they are among us and used for thousands years. Freud when gave a new theory based on sex, no one believed that it will prove to be a mile stone. We can't put down anything just because we don't believe it or it looks to be lacking objectivity.

It is interesting that today in this world there are more palmists and astrologers than psychologists. Interestingly their client tail is also longer than we psychologists'. And even funnier thing is that in countries like India they are more often visited by people in need. And actually at times they prove to be more than future teller and very quickly they get into the shoes

of a counselor and their success suggest that they are quite successful too. There must be some truth and validity behind the thing that earns so much belief and faith of so many people including many exact scientists. People may wonder how such a thing can survive for thousand years if it does not have any application and contribution to mankind.

A big research work is available in psychology literature for measuring the same things with a different perspective. But most of the researches are related to dermatoglyphic patterns. More over, most of the research work is either related to medical field or psychopathology. Here in this research an effort will be made to draw the attention to the more traditional part of palmistry i.e. lines in the hands. Besides it, this research is more focused on personality traits and environmental effects on individual personality. Actually this research wants to bring out the importance and accuracy of palmistry in studying the various environmental, personal, psychological and emotional effects that are sometimes not possible by many ordinary tests. Actually once we know these effects and see how we can recognize them before getting too severe, then it is quite possible for psychology that it not only diagnose the patients and give help to them but also suggest some preventive measures for many people who are prone to different psychological problems.

Review of the Literature

Much research work is already being done in the western world.

Down (1909) discovered the relationship between simian line and Down's syndrome. Here it is important to note that in normal population simian line is found in only 1% to 5% hands. While in the cases of Down's syndrome its frequency increases very significantly, ranging 31% to 86% as reported in different researches. Wilson (1924) found that schizophrenics show more abnormalities in the head line and heart line (78% for head line and 71% for heart line) compared to the hands of normal people.

Wolff (1951) confirms this observation in his famous book. He also reports that simian line is found in 15% schizophrenic hands as compared to 11% in mentally disabled and 5% in normal population. He further writes that the hands of bipolar patients are very frequently featured with malformations in both the heart line and head line.

Hilbun (1970) reported the high number of whorl pattern in the finger print patterns of psychotic children. He further adds in the same research that psychotic children also have a significantly high frequency of a palmer loops and bigger AtD angle.

Chaube (1977) notes, "The palmar flexion creases of fully diagnosed patients of throat cancer (n = 120) and tuberculosis (n = 80) have been compared with a control group (n = 150) of the same stock. The palmar flexion creases of cancer and tuberculosis patients are significantly different from those of the control population."

Walker (1977) studied the finger prints of autistic children. Dermatolglyphic patterns of autistic children were compared to those of control subjects matched socioeconomically and by

age and sex. Analysis of dermal ridge patterns and ridge counts resulted in significant differences between the 78 autistic and 78 normal children. Differences from normal expectation in the autistic children were most apparent in the reduced number of whorls and increased number of arches, in lowered ridge counts, and in less distinctness in formation of ridge line. The number of dermal ridges on autistic hands was much lower for each finger as well as for the total hand. Other abnormalities of ridge structure among the autistics were noted and described. Complete absence of transverse crease in this sample was combined with other dermatoglyphic evidence to argue for the separateness of autism from other pathological syndromes.

Pomrock et al. (1982) noticed that the quality of especially the head line is usually much lower in the hands of people who suffer from schizophrenia as compared to non schizophrenics. In the same research they also report the significantly high number of lines in the hands of schizophrenia patients.

Spier (1983) writes that in the case of most adults the task of the psycho-chirologist is necessarily of a therapeutic nature; with children, however, it is possible to intervene in time and to take prophylactic steps..... a chirological analysis every often shows that the difficulties in the development of the child are not produced by its own inadequate dispositions but by conflicts and mostly unconscious difficulties the parents which disturb, upset and frighten the child or force it into opposition and obstinacy.

Cannon et al (1994) also found that many-many fine lines are found in the hands of 7 out of 46 schizophrenic patients while none of the 43 controls had that many fine lines in his hands.

Milicić et al (2003) examined the role of the dermatoglyphic traits of autistic patients and their families, and the transmission of the autism. Finger and palm prints were taken from 120 autistic patients (92 males and 28 females), their parents (92 mothers and 70 fathers), 32 healthy brothers and 28 sisters, as well as 400 healthy controls (200 males and 200 females). An analysis of quantitative traits of dermatoglyphs on the fingers (FRC - finger ridge count) and palms (a-b, b-c, and c-d ridge count, and atd angle) was performed. Multivariate analysis showed significant differences among examined groups of autistic patients and their family members and healthy volunteers. Autistic male patients differed significantly from the healthy controls in the ridge count (RC) on the fourth and fifth finger, and in a-b RC and atd angle of both hands. Healthy fathers of autistic patients differed in atd angle, and brothers of autistic patients differed in all palmar variables from the healthy control group. Mothers of autistic patients differed significantly from the healthy female controls in the RC of the first, fourth, and fifth finger, in a-b and c-d RC on the palms, and atd angle of both hands.

Lippa (2003) finds that the ratio of index and ring finger lengths (2D:4D) is thought to be a marker of prenatal androgen exposure. In a sample of over 2,000 participants, men had significantly lower 2D:4D ratios than women (d = .36 and .23 for right and left hands, respectively), and these results were consistent across ethnic groups. Heterosexual men had significantly lower (more male typical) 2D:4D ratios than gay men (d = .32 and .31) for right and

left hands, respectively), and these results tended to be consistent across ethnic groups. Heterosexual and lesbian women showed no significant differences in 2D:4D ratios, after ethnicity was taken into account. The current findings add to evidence that prenatal hormonal factors may be linked to men's sexual orientation.

Bailey et al (2004) in his study points out that variation in the influence of prenatal androgens is thought to be reflected in an individual's finger length ratio (2D:4D). The relationship between adult finger length ratio and traits is thought to be affected by prenatal androgens. They found that men with more feminine finger ratios scored higher on a test for depression measured as a personality trait ($p = 0.04$).

Rosa et al. (2005) analyzed dermatoglyphics in schizophrenia as markers of prenatal brain injury. The neuro-cognitive functions and dermatoglyphic variables in 89 sibling pairs discordant for schizophrenia spectrum disorders were analyzed. The affected siblings were significantly impaired on all the cognitive variables assessed (Wisconsin Card Sorting Test, Trail Making Test and Continuous Performance Test) and had a greater number of dermatoglyphic anomalies. These results suggest the influence of intrauterine environmental factors in the siblings affected with schizophrenia.

Brosnan (2008) notes, "Recent research has identified a relationship between digit ratio and basic numeric competency. This basic numerical competency has been argued to be influenced by biological factors. The present study extended this finding to academic assessment, namely the Standardized Assessment Tests undertaken in numeracy and literacy by children in the UK at the age of 7. The present study hypothesized that digit ratio would correlate with the relative difference between numeracy and literacy abilities. Digit ratios were calculated for 75 (mainly Caucasian) children aged between 6 and 7 attending a state funded infant school. The digit ratios were then correlated with the results from their National Standard Assessment Tests (SATs). A significant correlation was found as hypothesized. Additionally, there was a negative correlation between digit ratio and numeracy for males (indicating higher prenatal testosterone exposure related to higher numeracy SAT scores) and a positive correlation between digit ratio and literacy for females (indicating lower prenatal testosterone exposure related to higher literacy SAT scores)."

Objectives of the Study

1. To study the relation between fork close to wrist blow Middle Finger and childhood crisis.
2. To study the relation between curving middle finger and headline moving towards wrist and the depression level.
3. To study the relation between an island in head line below Middle Finger and regular headaches.
4. To study the relation between an island in heart line or head line below Ring finger and weak eyesight.

5. To study the relation between a marriage line drooping towards the heart line and poor marital adjustment.

Statements of Problems

1. Is there any relation between fork close to wrist blow Middle Finger and childhood crisis?
2. Is there any relation between curving middle finger and headline moving towards wrist and the depression level?
3. Is there any relation between an island in head line below Middle Finger and regular headaches?
4. Is there any relation between an island in heart line or head line below Ring finger and weak eyesight?
5. Is there any relation between a marriage line drooping towards the heart line and poor marital adjustment?

Methodology

Variables in the study

- **Independent Variable:** For this study all the signs will be studied in the active hand only. Active hand is the hand with which a person writes or does most of his works. For example if a person writes with his right hand then his right hand will be considered. Same is the case with the left handers too. Here we have five independent variables that are described as below:

1. **Fork blow Middle Finger very close to Wrist:** A fork in palmistry refers to a line ending with two branches. This figures looks like a **"Y"** letter of English language. Such a Y sign or fork is seen below the Middle finger in few people's hands. This Fork is sometimes the starting of so called fate line or Saturn line. This line can easily be recognized as it moves up towards the middle finger. But here we are talking of this fork only if this appears to be close to the wrist. Close to wrist will mean here within 1.5 cm distance from the top bracelet line. This fork below the Middle finger close to the wrist is the independent variable in the first problem.

2. **Curving Middle Finger:** In few hands finger are seen to be curved inwards. Our First independent variable of second problem is curving middle finger alone. Please refer to the image given blow for better understanding.

3. **Head Line moving towards wrist** In some hands the head line, instead of going horizontal way, moves down towards the wrist. This is the second variable of the second problem. Please understand it from pictures given below.

4. **Island below Middle Finger in Head Line:** An island is a wheat grain like shape in a line. It can be seen in some hands. Here our independent variable in the third problem is same island shape below the middle finger in so called Head line. Head line is the second horizontal line in the hand. Please refer to the picture given below.

5. **Island below Ring finger in Head Line or Heart Line:** The independent variable of the forth Problem is the same island below the Ring Finger in head line or heart line. Heart line is the first horizontal line (close to the finger) in hand. Head line is the second horizontal line (below the heart line) in the hand. Please refer to the picture below.

6. **Drooping Marriage Line:** The small horizontal lines close to the little finger are known as marriage lines in the hand. Please understand their situation from the picture given below. They are found between the heart line and little finger. Sometimes these marriage lines move down towards the heart line. This drooping marriage line is the independent variable in the fifth problem.

Dependent Variables

Below is the brief description of the Dependent Variables:

1. **Childhood Crisis**

By the term Childhood Crisis we mean those situations where a child doesn't find the necessary love and affection from his parents that is needed for the good upbringing of a child. Researches suggest that children of single parents or no parents have higher chances of getting many psychological problems as compared to the children having both parents. It is also usually seen that children whose parents are having disputes between them tend to remain more sad and silent instead of being cheerful.

A shocking **2003 Swedish study**, stated that those living with a single parent were about three times more likely to kill themselves or end up in the hospital after an attempted suicide by the age of 26 than children living with two parents, however this only happened to 2.2 percent of girls and 1 percent of boys.

Crockett M, (1994) reported that children who have experienced the separation or divorce of their parents often have poorer average outcomes than those who have not. The effects of single-parent family life on children fall into two categories: (1) those attributed to the lower socioeconomic status of single parents and (2) the short-term consequences of divorce that moderate over time. Four factors are predictive of U.S. children's adjustment to the divorce of their parents: the passage of time, the quality of the children's relationship with their residential parent, the level of conflict between parents, and the economic standing of the children's residential family. In the first few years after a divorce, the children have higher rates of antisocial behavior, aggression,

anxiety, and school problems than children in two parent families. However, some of these problems may be attributed to a decrease in available resources and adult supervision; many of the negative effects disappear when there is adequate supervision, income, and continuity in social networks.

Here for this research the term Childhood Crisis has been used for the under listed events:

i. Death of one of parents
ii. Divorce of parents
iii. Too much disputes of the parents
iv. Child not living with his parents for some other reason so that missing that care and affection

For this research the age of adolescence is also taken in the same term Children. So for this study the term children means all subjects below the age of 18. Most of the parents in India also believe their children to be child till this age. This age is considered the age of maturity or being adult.

2. Depression Level

The term depression is well defined in psychological literature. The following are the main symptoms of depression.

i. A person may report feeling "sad" or "empty" or may cry frequently. Children and adolescents may exhibit irritability.
ii. A person may show markedly diminished interest or pleasure in all, or almost all, daily activities.
iii. Insomnia or sleeping too much may be a symptom of depression.
iv. The person may be observed to be either agitated or restless or physically slowed down in their movements.
v. Deep fatigue or a loss of energy is a symptom of depression.
vi. A depressed person may feel that they have no value or they may feel inappropriately guilty about things they have no control over.
vii. A depressed person may have a diminished ability to think, concentrate or make decisions.
viii. A depressed person may have recurring thoughts of death, especially thoughts of suicide, with or without a specific plan.
ix. A person may show markedly diminished interest or pleasure in all, or almost all, daily activities.
x. Significant changes in weight when not attempting to gain or lose (a gain or loss of 5% or more in a month) may be indicative of depression. In children, this may also present as a failure to make expected weight gains.

3. Regular Headaches

A headache involves pain in the head which can arise from many disorders or may be a disorder in and of itself. According to guidelines established by the **International Headache Society (IHS) in 2004** headaches can be categorized as primary or secondary. Primary headaches occur independently and are not the result of another medical problem. Secondary headaches are caused by illness, infection, or injury and account for less than 10 percent of all headaches.

There are many classifications of headaches, including more than 150 diagnostic headache categories identified by the **International Headache Society**. In general, there are three types of primary headaches, including:

Primary Headaches

Tension headaches—muscular contraction headaches that occur periodically or daily (chronic daily headache). The typical tension-type headache is described as a tightening around the head and neck, and an accompanying dull ache. The headache may last from 30 minutes to several days. Tension headaches usually are not associated with symptoms of **nausea** or **vomiting.**

Migraine—moderate to severe throbbing pain occurring on one or both sides of the head. Migraines are often accompanied by other symptoms such as nausea, vomiting, blurred vision, and sensitivity to light, sound, strong odors, and movement. A migraine with aura has accompanying "warning signs" that indicate a pending attack. A hemiplegic migraine is associated with weakness on one side of the face, arm, or leg. A migraine may last from two to 48 hours and usually occurs two to four times per month.

Cluster headaches—severe headaches characterized by pain centering around one eye, and eye tearing and nasal congestion occurring on the same side. The headache lasts from 15 minutes to four hours and may recur several times in a day. Cluster headaches have a characteristic grouping of attacks, which may last from two weeks to three months.

Secondary Headaches

Secondary headaches, which are caused by diseases or disorders, are categorized as either traction or inflammatory headaches. Traction headaches result from the pulling, stretching, or displacing of structures that are sensitive to pain, as when a brain tumor presses on the outer layer of nerve tissue that covers the brain. Inflammatory headaches are caused by infectious diseases of the ears, teeth, sinuses, or other parts of the head.

4. Eyesight/Visual Acuity

This term is well known in the society. Here it carries the normal meaning. Any subject needing the glasses for improving vision/eyesight is said to have weak eyes. Normal eye sight is well known to be the 6/6 or 20/20 vision measured by optician's chart. This clarity of eye sight is commonly known as visual acuity in medical science.

Visual acuity depends upon how accurately light is focused on the retina (mostly the macular region), the integrity of the eye's neural elements, and the interpretative faculty of the brain. Normal visual acuity is frequently considered to be what was defined by Snellen as the ability to recognize an optotype when it subtended 5 minutes of arc, which is Snellen's chart 20/20 feet, 6/6 meter, 1.00 decimal or 0.0 logMAR. In humans, the maximum acuity of a healthy, emmetropic eye (and even ametropic eyes with correctors) is approximately 20/16 to 20/12, so it is inaccurate to refer to 20/20 visual acuity as "perfect" vision. The significance of the 20/20 standard can best be thought of as the lower limit of normal or as a screening cutoff. When used as a screening test subjects that reach this level need no further investigation, even though the average visual acuity of healthy eyes is 20/16 to 20/12.

5. **Marital Adjustment**

Locke et al (1959) says that "Marital adjustment is the accommodation of husband and wife to each other at a given time." In other words marital adjustment refers to process whereby individuals adjust their own lifestyles to the lifestyle of marriage so as to give proper space and respect to each other.

Landis (1964) writes, "Marriage and family are not optional; they are necessary. They meet man's deepest needs." Marriage provides a person an opportunity for a secure and protected satisfaction of his needs for companionship, affection and sexual expression. It involves the most intimate type of emotional relations between two individuals **(Coleman, 1964).** Many marriages fail because two partners fail to develop relationship which is characterized by mutual acceptance, trust, care, concern, love, admiration and sharing of role responsibilities.

Hypotheses

1. There exists a relation between fork close to wrist blow Middle Finger and childhood crisis.
2. There exists a relation between curving middle finger and headline moving towards wrist and the depression level.
3. There exists a relation between an island in head line below Middle Finger and regular headaches.
4. There exists a relation between an island in heart line or head line below Ring finger and weak eyesight.
5. There exists a relation between drooping marriage line and poor marital adjustment.

Sampling

Since it is the nature of the research, so sampling will be done from different sections of society. Sample will consist of 60 subjects for each problem. Sample will consist of equal

number of male and female subjects i.e. 30 males and 30 females for each problem. Sampling technique used will be quota sampling. The criterion for the inclusion in sample is as below:

Sampling Criterion

I. For the first problem only the subjects having a fork below the middle finger and close to wrist will be included in the sample. The age group of the subjects will be 18-40years.
II. For the second problem only the subjects having either curving middle finger or head line moving towards the wrist will be included. The subjects having these two conditions will also be included. The age group of the subjects will be 18-40years.
III. For the third problem only the subjects having troubles of regular headaches (at least twice a week for 3 months) and diagnosed with migraine will be included in the sample. The age group of the subjects will be again 18-40 years.
IV. For the forth problem only the subjects wearing glasses of at least plus or minus one number will be included. The age group of the subjects will be again 18-40 years.
V. For the fifth problem only the married subjects having any one of marriage line drooping towards the heart line or forking will be included. The age group of the subjects will be 25-50years.

Tool used

1. Personal assessment inventory by IPAT
2. Test of marital adjustment by P. Kumar and K. Rohatagi
3. Interview

Statistical Analysis

Proper statistical technique shall be employed for the analysis of the data obtained. The nature of the present study is more like a survey research.

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